After considerable research during the brief period of time since the posting of the Notice of Inquiry in ET Docket 03-104 regarding Broadband over Power Lines (BPL), I have come to the conclusions that:

(a) reports from Europe[(1)], Japan[(2)], and the USA[(3)] show that current BPL technology, even when emission levels are compliant with present Part 15 non-intentional emission levels, can cause interference that *significantly* degrades the capability of radio services in the HF and VHF spectrum;
(b) based upon these reports, one can reasonable expect that widespread roll-out of HF/VHF carrier-based BPL services under the currently allowed emission levels could lead to the serious impairment, if not elimination, of most amateur radio communications;
(c) Part 15 specifications for procedures and emission limits for assessment of access- and inhouse-BPL radiation appear to be inadequately permissive in regard to the task of evaluating potential adverse impact on other services in the HF/VHF spectrum, and therefore new standards and procedures should be developed and implemented; and,
(d) the FCC must continue to provide regulatory assurance that new technologies will not contribute to unintentional interference to existing services.

Despite potential (albeit probably short-term) benefits, BPL may pose a serious threat to HF/VHF services in general and to the Amateur Radio Service in particular. While encouragement of technology development is the hallmark of an industrious and economically healthy society, so to is the realization that new endeavors should not adversely affect, let alone seriously weaken, the existing framework upon which technological development is built. A very large portion of all scientists, engineers, and technicians found stimulation in their early years through their interest in amateur ("ham") radio. Indeed, much of our communications technology today was, and continues to be, conceived and developed by hams. It would therefore behoove all, and especially our government, to preserve one of the proven seedbeds of communications technology expertise (not to mention a reliable source of emergency communications!) - the Amateur Radio Service. Inappropriately suppressed unintentional emissions from poorly designed and implemented power line communications, even those that may fall within currently acceptable Part 15 levels, have been clearly demonstrated to be of serious consequence to the amateur radio services, to the potential extent of prohibiting all usable HF/VHF communications modes within the affected areas. It is not unreasonable to then expect that implementation of HF/VHF carrier-based BPL services under the currently allowed emission levels could lead to the severe impairment and eventual elimination of amateur radio communications. This must not be allowed to happen.

Therefore, while still offering appropriate encouragement of this and other new technologies, I urgently request that the FCC also faithfully and aggressively pursue its regulatory role in preventing any interference to existing service capabilities and specifically to the amateur radio service.

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**References:**

(1) *EMC: The Impact of Power Line Communications*, Part 1 & 2, D. Hansen, Compliance Engineering Magazine (http://www.ce-mag.com/archive/03/ARG/hansen1.html *and* http://www.ce-mag.com/archive/03/ARG/hansen2.html)

(2) *Japan Amateur Radio League Campaign Against PLC in HF bands*, summary presentation by Cosy Muto,PhD (http://www.qsl.net/jh5esm/PLC/JARLcampaignPLCe.pdf).

(3) *Calculated Impact of PLC on Stations Operating in the Amateur Radio Service*, E. Hare, W1RFI (ARRL Laboratory Manager), IEEE C63 EMC Standards Committee Meeting, November 2002 (http://www.arrl.org/tis/info/HTML/plc/files/C63NovPLC.pdf).